

3.3.4.3 Alvar

3.3.4.3.1 Community Overview

This rare community consists of areas of thin, discontinuous soil overlying horizontal beds of limestone or dolomite in the vicinity of Great Lakes shorelines. These communities support an unusual blend of boreal and prairie species, which appear to be relicts of the cold period following the last glaciers and of the warmer, drier period that followed. They are characterized by relatively low tree cover and a distinctive biota which includes elements of rock pavement, prairie, savanna and boreal forest communities. Among these are regional endemics, some of which are globally very rare. This community type is much more common and better developed in Michigan and Ontario than in Wisconsin.

Small coniferous and deciduous trees such as northern white cedar, balsam fir, pines, oaks, aspens, and white birch are scattered among an assemblage of species that can include big bluestem, little bluestem, Indian-grass, and wood lily, as well as shoreline plants such as silverweed and dwarf lake iris. One species, lakeside daisy, occurs nowhere else in the world except on Great Lakes alvars and several isolated places in Illinois. Alvars are home to an unusual set of wildlife species as well, including the loggerhead shrike and a large number of distinctive invertebrates such as leaf-hoppers and land snails.

3.3.4.3.2 Vertebrate Species of Greatest Conservation Need Associated with Alvar

There were not any vertebrate Species of Greatest Conservation Need that were identified as moderately or significantly associated with alvar.

3.3.4.3.3 Threats and Priority Conservation Actions for Alvar

3.3.4.3.3.1 Statewide Overview of Threats and Priority Conservation Actions for Alvar

The following list of threats and priority conservation actions were identified for alvar in Wisconsin. The threats and priority conservation actions described below apply to all of the Ecological Landscapes in Section 3.3.4.3.3.2 unless otherwise indicated.

Threats and Issues

- Many of these sites are on private land, and their quality can be seriously threatened by the increasing encroachment of developments, and to a lesser extent by quarrying.
- Plant collection, such as the "harvesting" of stunted trees by bonsai collectors, is also a threat in some areas.
- Some sites are being altered and colonized by woody species, such as eastern red cedar and the invasive plant Tartarian honeysuckle.

Priority Conservation Actions

- Minimize adverse impacts from quarrying, residential development and unregulated plant collection on significant sites.
- Thin sites with dense woody species cover to maintain rare plant populations and community structure.
- Control and eradicate, when possible, invasive species such as Tartarian honeysuckle.

3.3.4.3.3.2 Additional Considerations for Alvar by Ecological Landscape

Special considerations have been identified for those Ecological Landscapes where major or important opportunities for protection, restoration, and/or management of alvar exist. Those considerations are described below and are in addition to the statewide threats and priority conservation actions for alvar found in Section 3.3.4.3.3.1.

Additional Considerations for Alvar in Ecological Landscapes with **Major** Opportunities for Protection, Restoration, and/or Management

Central Lake Michigan Coastal

Red Banks Escarpment and Glades (Brown County) is the most prominent alvar community in Wisconsin. This site contains one of the most diverse snail communities known in the Midwest and is one of the most important areas in Wisconsin for land snails. Colonies of 25 different groups of glacial relict snails can be found from the base to the top of the escarpment. Of interest are the number of rare and glacial relict snail taxa that are present including the cherrystone drop and the Midwest Pleistocene vertigo snail.

Additional Considerations for Alvar in Ecological Landscapes with **Important** Opportunities for Protection, Restoration, and/or Management

Northern Lake Michigan Coastal

Idlewild Alvar (Door County) is a lower quality site that may nonetheless offer some potential conservation opportunity.